

## YEAR 11 A/D/E – CHEMISTRY (Girls)

**WEEK 11 (8<sup>th</sup> November to 12<sup>th</sup> November)**

**Work Sent to the students through Zoom Learning Platform / Google classroom**

**Topic:**– SC19a: Exothermic and Endothermic reactions

**Resources:** Text book, Worksheet, Board works power point

| Date   | Topic  |   |
|--|--|---|
| <b>8.11.20</b><br>Sunday<br>8 <sup>th</sup> period<br><br><b>Mode of Teaching:</b><br>Zoom     | <b>Learning Objective: (Assessment)</b><br>To be able to apply the knowledge and understanding of the concepts of Rates of reaction, Factors affecting reaction rates and Catalysts, to answer the questions in the assessment.<br><br><b>Learning Outcome:</b><br>Students will be able to recall the concepts learned in the previous lessons and apply their knowledge and understanding to answer the questions, in the assessment.  | Teacher will conduct the <b>assessment</b> through Google forms and monitor the students on Zoom. |
| <b>9.11.20</b><br>Monday<br>4 <sup>th</sup> period<br><b>Mode of Teaching:</b><br>Zoom         | <b>Learning Objective:</b><br>Recall that changes in heat energy accompany the following changes: a) salts dissolving in water b) neutralisation reactions c) displacement reactions d) precipitation reactions and that, when these reactions take place in solution, temperature changes can be measured to reflect the heat changes<br><br><b>Learning Outcome:</b><br>Recall the different types of reactions.<br>Give examples of different types of reactions.<br>Recall the unit of temperature.<br>Understand the difference between heat and temperature. | Teacher uses powerpoint presentation with interactive questions                                   |
| <b>11.11.20</b><br>Wednesday<br>8 <sup>th</sup> period<br><br><b>Mode of Teaching:</b><br>Zoom | <b>Learning Objective:</b><br>Describe an exothermic change or reaction as one in which heat energy is given out<br>Describe an endothermic change or reaction as one in which heat energy is taken in<br><br><b>Learning Outcome:</b><br>Understand concept of exothermic and endothermic reactions.<br>Cites examples of exothermic and endothermic reactions<br>Identify the exothermic and endothermic reactions.<br>Appreciate the use of hot pack and cold pack as examples of exothermic and endothermic reactions respectively.                            | Teacher uses power point presentation with interactive questions                                  |
| <b>12.11.20</b><br>Thursday<br>5 <sup>th</sup> Period<br><b>Mode of Teaching:</b><br>Zoom      | <b>Learning Objective:</b><br>Draw and label reaction profiles for endothermic and exothermic reactions<br><br><b>Learning Outcome:</b><br>Develop skill in representing the <b>energy profile using a graph.</b><br>Interpret the ideas in graphical questions  | Teacher uses power point presentation with interactive questions                                  |
| <b>12.11.20</b><br>Thursday<br>6 <sup>th</sup> Period<br><b>Mode of Teaching:</b><br>GC        | <b>Learning Objective:</b> To answer the questions, on Exothermic and Endothermic reactions, in the worksheet.<br><br><b>Learning outcome:</b> Students will be able to reinforce the concepts learned in the previous lesson by answering the questions in the worksheet.   | Worksheet assigned through GC.  |

**HOMEWORK:** Complete the textbook Qs SC19a: Exothermic and Endothermic reactions 144 – 145

## YEAR 11 B/C/F – CHEMISTRY (Boys)

**WEEK 11 (8<sup>th</sup> November to 12<sup>th</sup> November)**

**Work Sent to the students through Zoom Learning Platform / Google classroom**

**Topic:**– SC19a: Exothermic and Endothermic reactions

**Resources:** Text book, Worksheet, Board works power point

| <b>Date</b>  | <b>Topic</b>   |   |
|--|--|---|
| <b>8.11.20</b><br>Sunday<br>1 <sup>st</sup> Period<br><br><b>Mode of Teaching:</b><br>Zoom | <b>Learning Objective: (Assessment)</b><br>To be able to apply the knowledge and understanding of the concepts of Rates of reaction, Factors affecting reaction rates and Catalysts, to answer the questions in the assessment.<br><br><b>Learning Outcome:</b><br>Students will be able to recall the concepts learned in the previous lessons and apply their knowledge and understanding to answer the questions, in the assessment.  | Teacher will conduct the <b>assessment</b> through Google forms and monitor the students on Zoom. |
| <b>8.11.20</b><br>Sunday<br>2 <sup>nd</sup> Period<br><br><b>Mode of Teaching:</b><br>Zoom | <b>Learning Objective:</b><br>Recall that changes in heat energy accompany the following changes: a) salts dissolving in water b) neutralisation reactions c) displacement reactions d) precipitation reactions and that, when these reactions take place in solution, temperature changes can be measured to reflect the heat changes<br><br><b>Learning Outcome:</b><br>Recall the different types of reactions.<br>Give examples of different types of reactions.<br>Recall the unit of temperature.<br>Understand the difference between heat and temperature. | Teacher uses power point presentation with interactive questions                                  |
| <b>9.11.20</b><br>Monday<br>3 <sup>rd</sup> Period<br><br><b>Mode of Teaching:</b><br>Zoom | <b>Learning Objective:</b><br>Describe an exothermic change or reaction as one in which heat energy is given out<br>Describe an endothermic change or reaction as one in which heat energy is taken in<br><br><b>Learning Outcome:</b><br>Understand concept of exothermic and endothermic reactions.<br>Cites examples of exothermic and endothermic reactions<br>Identify the exothermic and endothermic reactions.<br>Appreciate the use of hot pack and cold pack as examples of exothermic and endothermic reactions respectively.                            | Teacher uses power point presentation with interactive questions                                  |
| <b>10.11.20</b><br>Tuesday<br>7 <sup>th</sup> Period<br><b>Mode of Teaching:</b><br>Zoom   | <b>Learning Objective:</b><br>Draw and label reaction profiles for endothermic and exothermic reactions<br><br><b>Learning Outcome:</b><br>Develop skill in representing the <b>energy profile using a graph.</b><br>Interpret the ideas in graphical questions.   | Teacher uses powerpoint presentation with interactive questions                                   |
| <b>12.11.20</b><br>Thursday<br>4 <sup>th</sup> Period                                      | <b>Learning Objective:</b> To answer the questions, on Exothermic and Endothermic reactions, in the worksheet.<br><b>Learning outcome:</b> Students will be able to reinforce the concepts   | Worksheet assigned through GC.  |

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| <b>Mode of Teaching:</b><br>GC | learned in the previous lesson by answering the questions in the worksheet. |  |
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**HOMEWORK:** Complete the textbook questions SC19a: Exothermic and Endothermic reactions 144 – 145

## **YEAR 11 G/H–CHEMISTRY (IGCSE)**

**WEEK 11 (8<sup>th</sup> Nov to 12<sup>th</sup> Nov)**

**Work Sent to the students through Google classroom/Zoom Learning Platform**

**Unit 3 – Topic:** Acids, Alkalis and Salt Preparations

**Resources:** Text book, Worksheet, IGCSE science free lesson video, power point.

| Date                  | Lesson         | Topic  | Mode of Teaching                      |   |
|-----------------------|----------------|--|---------------------------------------|---|
| 08.11.2020<br>Sunday  | 1 11H<br>6 11G | <b>ASSESSMENT 3</b><br><br><b>Learning Outcome:</b> Assess the concepts related to acid, bases and chemical equilibrium.   | <b>Google Meet</b><br><br><b>zoom</b> | Google Form questions to assess the concepts of neutralization  |
| 09.11.2020<br>Monday  | 2 11H<br>5 11G | <b>Lesson Objective:</b> To calculate an unknown concentration of a solution<br><br><b>Learning Outcome:</b> Carry out simple calculations using the results of titrations to calculate an unknown concentration of a solution or an unknown volume of solution required.  | <b>Google Meet</b><br><br><b>zoom</b> | Teacher uses a PowerPoint presentation/video to teach the calculation of titration related problems.  |
| 10.11.2020<br>Tuesday | 3 11H<br>1 11G | <b>Lesson Objective:</b> Describe the method of titration to prepare the soluble salt.<br><br><b>Learning Outcome:</b> Identify the apparatus used in titration.<br><br>Write the procedure to prepare the soluble salt.<br><br>Suggest the safety precautions adopted while carrying out titration.               | <b>Google Meet</b><br><br><b>zoom</b> | Teacher uses a PowerPoint presentation/video to explain identification of soluble salts.              |
|                       | 4 11H<br>2 11G | <b>Lesson Objective:</b> Write balanced chemical equations for the reaction of acids with hydroxides, carbonates and oxides of the listed metals<br><br><b>Learning Outcome:</b> Describe the reactions of hydrochloric acid, sulfuric acid and nitric acid with metals, bases and metal carbonates (excluding the | <b>GC</b>                             | Instruction will be given in the GC room to complete the textbook and worksheet questions on balanced |

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|------------------------|------------------------------|--|--------------------------|--|
|                        |                              | reactions between nitric acid and metals) to form salts  |                          | chemical equations.  |
| 12.11.2020<br>Thursday | 5 <b>11H</b><br>4 <b>11G</b> | <p><b>Lesson Objective:</b> Explain the method of making a given salt from a suitable starting material, given appropriate information</p> <p><b>Learning Outcome:</b> Describe an experiment to prepare a pure, dry sample of a soluble salt, starting from an insoluble reactant</p> | <b>Google Meet /zoom</b> | Teacher uses PowerPoint presentation that contains interactive questions on methods to prepare salt. |

**HOMEWORK:** Complete the textbook questions